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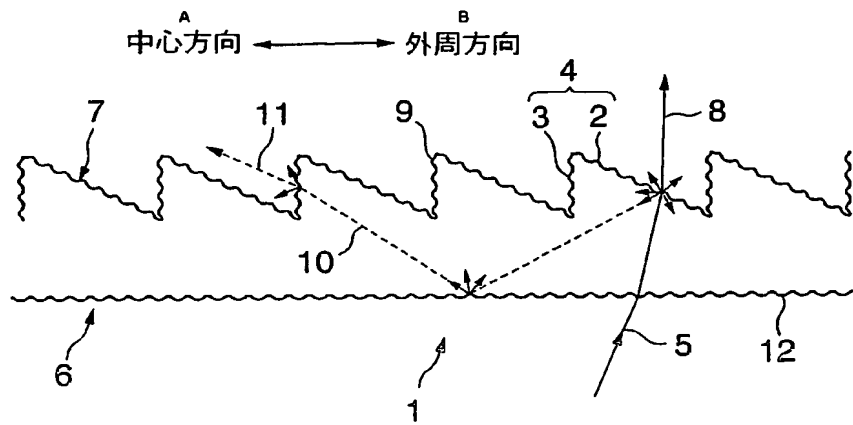
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(54) Title: FRESNEL LENS SHEET AND REAR PROJECTION SCREEN PROVIDED WITH IT

(54) 発明の名称: フレネルレンズシートおよびそれを備えた背面投射型スクリーン

A...CENTER DIRECTION  
B...OUTER PERIPHERY DIRECTION

(57) Abstract: A well-balanced Fresnel lens sheet being inconspicuous in rainbow, hot band, moiré, color cone or the like so that an observer can view a quality image without a sense of incongruity, keeping a bright uniformity, and not lowering the visibility of an image, and a rear projection screen provided with the sheet. The Fresnel lens sheet (1) has a Fresnel lens element group (4) consisting of a Fresnel lens plane (2) and a non-lens plane (3) on one sheet plane (output plane (7)), wherein the surface roughness of at least one plane out of the Fresnel lens plane (2) of the Fresnel lens element group (4), the non-lens plane (3) of the Fresnel lens element group (4), and a sheet plane (12) on a side where the Fresnel lens element group (4) is not formed is made rougher continuously or in steps as it is farther away from the center of the Fresnel lens sheet (1). It is preferable that the difference between the surface roughness at the center of the Fresnel lens sheet (1) and that at the outer periphery thereof be at least 0.1  $\mu\text{m}$  and up to 5.0  $\mu\text{m}$ .

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WO 2004/066025 A1

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2004/000531

## A. CLASSIFICATION OF SUBJECT MATTER

Int.Cl<sup>7</sup> G03B21/62, G02B3/08, G02B5/00, G02B5/02

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl<sup>7</sup> G03B21/62, G02B3/08, G02B5/00, G02B5/02

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Jitsuyo Shinan Koho 1922-1996 Toroku Jitsuyo Shinan Koho 1994-2004

Kokai Jitsuyo Shinan Koho 1971-2004 Jitsuyo Shinan Toroku Koho 1996-2004

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	JP 6-235976 A (Kuraray Co., Ltd.), 23 August, 1994 (23.08.94), Full text; all drawings (Family: none)	1-8
Y	JP 6-14218 Y2 (Dainippon Printing Co., Ltd.), 13 April, 1994 (13.04.94), Full text; all drawings (Family: none)	1-8

☐ Further documents are listed in the continuation of Box C.☐ See patent family annex.

\* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

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"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

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"&amp;" document member of the same patent family

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Name and mailing address of the ISA/  
Japanese Patent Office

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